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Re: 1604-112576

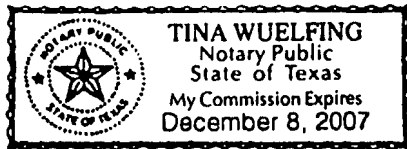
To Whom It May Concern:

This is to certify that a professional translator on our staff who is skilled in the Chinese language translated Reference #: 2316.889USRE from Chinese into English.

We certify that the attached English translation conforms essentially to the original Chinese language.

Kim Vitray  
Operations Manager

Subscribed and sworn to before me this 16th day of April, 2007.



Tina Wuelfing  
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Job No.: 1604-112576

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### Citation

Database of the Patent Publications [Gazettes] of the Republic of China – Patent Publication in Full Text

\*\*\* The present reference is for reference only, and for full information, the patent publication issued by the Bureau of Intellectual Property, Ministry of Economy is to prevail. \*\*\*

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Cited reference for Application No. 87120346

Patent Publication No.: 306723

Patent Publication Date: 05/21/1997

International Patent Classification: H04N5/38, H04B1/04

Patent Application No.: 84210618

Patent Application Date: 07/27/1995

Volume of the Publication: 024, Publication Number: 015

Type of Patent Rights: Utility Model

Patent Certificate No.: 124515

Title of the Patent: A modular special modulating and amplifying circuit for a radio frequency video signal transmitter

Name (Address) of the Inventor: LUO Yee-cheng (3 fl, 3 Lane 61, Yu-min Road, Tucheng City, Taipei County)

Name (Address) of the Inventor: LIAO Wen-sheng (45-2 Hsih-pei Neighborhood, San-hsia Town, Taipei County)

Name (Address) of the Applicant: Fuhua Electronic Co. Ltd. (22 Section 3, Chongshan North Road, Taipei City)

### Claims:

1. A video signal radio frequency modulating circuit, which is a circuit device with which VIDEO and AUDIO signals are regulated and mixed to be carried in a radio frequency signal, and which is characterized in that a VCO oscillation circuit is formed, consisting of a transistor (1) Q2, the base of which is connected to the cathode of (3) D1 varactor diode and (2) L1 resonant coil through (20) C5 coupling capacitor, to generate an oscillation signal, the emitter of transistor (1) Q2 is connected via resistor (21) R7 to the primary side of the balanced/unbalanced output transformer (7) T2, and then said radio frequency oscillation signal is converted and outputs from the 2<sup>nd</sup> side of the balanced/unbalanced radio frequency transformer (7) T2 two balanced oscillation signals, which are respectively input into a mon cathode pin and the other

monoanode pin of (6) D2 balanced modulating duo-diode, for AM amplitude modulation with the VIDEO signal, while the VIDEO signal is input from a pin shared by the cathode and the anode of the (6) D2 balanced modulating duo-diode via (22) R37 the resistor for AM amplitude modulation with the radio frequency oscillation signal, and said radio frequency signal after modulation is sent out from the pin shared by the cathode and anode of (6) D2 and through the transistor amplified circuit of (23) Q3, (24) Q5, (25) Q4, (26) Q6, (27) Q7.

2. A video signal radio frequency modulating circuit as described in Claim 1, which is characterized in that the primary side of (7) T2 balanced/unbalanced transformer is connected in parallel with a (9) R41 resistor forming a stable circuit for the radio frequency oscillation signal.

3. A video signal radio frequency modulating circuit as described in Claim 1, which is characterized in that connected in the pin shared by the cathode and the anode of the (6) D2 balanced modulating duo-diode there is an (8) J4 lead trimmer capacitor and at the center of (7) T2 the balanced/unbalanced radio frequency transformer there are (11) R34 and (12) C6 of point contact to ground, forming a compensation and trimmer circuit of the VIDEO radio frequency AM amplitude modulation.

#### Brief description of the figures:

Figure 1 is a system block diagram of the present creation

Figure 2 is a detailed circuit drawing of the present creation

Figure 3 is the configuration of the baseboard of the circuit of the present creation

Figure 4 is a block diagram of the present creation.

Patent related diagram file: (Figure 1), (Figure 2)

Patent related publication: NO relevant articles found in the database.

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Terms for input and search

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Full text of the patent publication

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Patent Execution: APIPA

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Citation

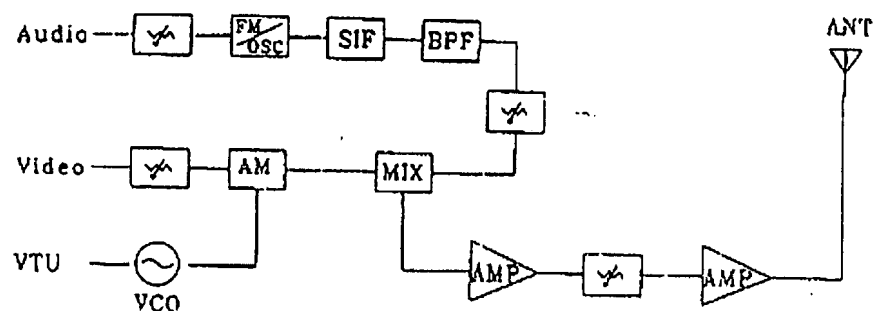


Figure 1

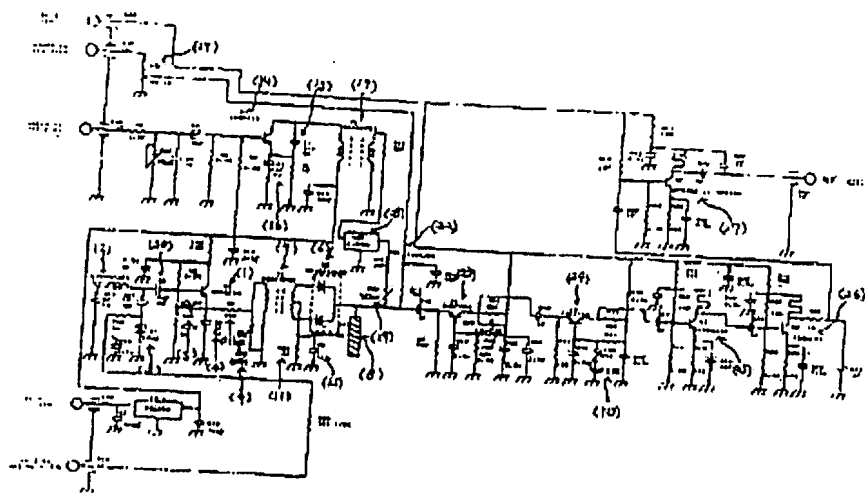


Figure 2

## Citation

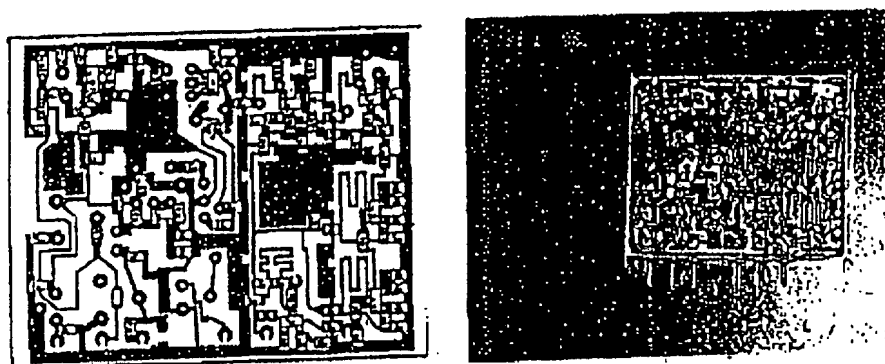


Figure 3

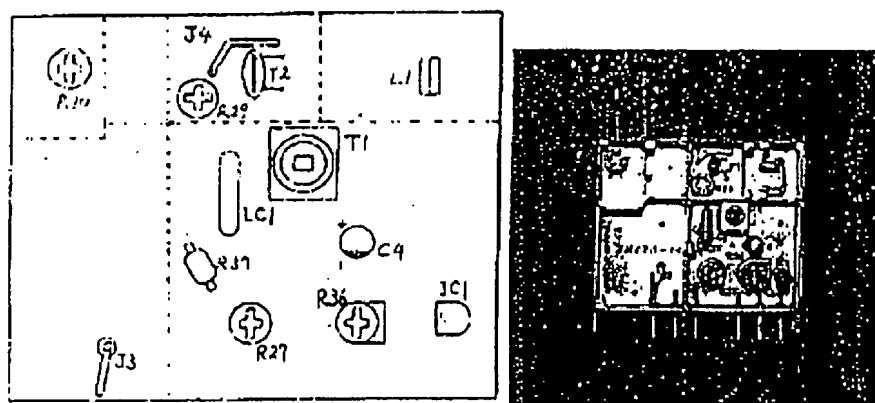


Figure 4

## Binding Line

Decision on Approval and Denial of Patent by the Bureau of Intellectual Property,  
Ministry of Economy

Date Article Received: March 9, 89<sup>th</sup> [2000]

Received by: ADC Telecommunications Company (Agents: Mr. YUN Yee-chun and Mr. CHEN Wen-lang)

Address: 7 fl, 248 Section 3, Nanking East Road, Taipei City

Date Document Issued: March 7 of the 89<sup>th</sup> Year of the Republic of China

Document No.: (89) Chi Chuan 2 (2) 04033 Tzi No. 08983003389

I. Application No.: 087120346 Category: 1104N 7 / 10

II. Invention Title: A Radio Frequency Circuit Module and Frame with Amplifier

### III. Applicant:

Name: ADC Telecommunications Company

Address: USA

### IV. Patent agents:

Name: YUN Yee-chun      Mr

Address: 7 fl, 248 Section 3, Nanking East Road, Taipei City

Name: CHEN Wen-lang      Mr

Address: 7 fl, 248 Section 3, Nanking East Road, Taipei City

### V. Application Date: December 8, 87<sup>th</sup> Year [1998]

### VI. Priorities:

1 1997 / 12 / 10      US 08 / 988, 047

### VII. Name of the Examiner: CHIANG Yee-wu Examiner

### VIII. Content of the Decision:

Main body: A patent should not be granted in the present case.

Based on: Article 19, Article 20 II, of the Patent Law.

On the grounds that:

(1) The present case is a modular RF circuit component structure used in a broadband radio frequency system, and it is mainly characterized in that it is an amplifier circuit with two co-axial connectors electrically linked inside the module of the amplifier, with one separating framework outside the module, and the transformer may be installed on the wall of the framework, and it may also be installed inside the module on the framework, so that it is applicable to cable management and easy maintenance and service of the terminal through the modular structure.

(2) The major content of the application of the present case is to provide a combination of an amplifying framework and a module for a radio frequency signal, and it not only includes an electrically conductive casing, but also an amplifier circuit with two co-axial connectors linked inside the module, one separating transformer outside the module, and the module can be installed on the framework, to provide simple cable management and maintenance in the environment of application of the cable TV terminal through the modular spacial morphology. However, the modular structure of a radio frequency circuit belonged to existing technology before it was applied for as above, and it was found that Publication No. 306723 "Special Modulation and Amplification Circuit of a Module of a Radio Frequency and a Video Signal Emitter" involves a modular structure related to a video signal and radio frequency modulation

circuit. The material of the casing of the amplifier and the positions of the co-axial cable connectors and the transformer, in the present case, are all purely changes in the spacial morphology that can be easily implemented by those who are familiar with the technology of electronic circuits, so that the application can hardly be considered highly creative in regard to technical ideas. The present case is simply a change in the positions of a combination of components of the amplifier for easy management and maintenance, and this change can be easily implemented, since it is a change in the spacial morphology involving a continuing use of the principles of an old modular design and can be easily implemented by those who are familiar with said technology, without being supported by any essentials for a patent such as progressiveness; therefore the application does not fall into the range of establishment of an invention patent.

Based on the conclusions above, the present case is not in line with the legal essentials for a patent, and in accordance with Article 19 and Article 20 II, of the Patent Law, a decision is made as in the main body.

Director: CHEN Ming-bang